



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,634	02/08/2006	Dieter Guldenfels	031529.00106	1297
26712	7590	07/23/2009	EXAMINER	
HODGSON RUSS LLP			DEUBLE, MARK A	
THE GUARANTY BUILDING				
140 PEARL STREET			ART UNIT	PAPER NUMBER
SUITE 100			3651	
BUFFALO, NY 14202-4040				
MAIL DATE		DELIVERY MODE		
07/23/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/567,634

Filing Date: February 08, 2006

Appellant(s): GULDENFELS ET AL.

---

Alfonzo I. Cutaia  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed April 17, 2009 appealing from the Office action mailed April 17, 2009.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,308,825	Nakamura	10-2001
5,904,241	Verdigets et al.	5-1999
2002/0195321	Guldenfels	12-2002

2001/0045346 Costanzo 11-2001

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guldenfels (U.S. Pub. No. 2002/0195321) or Costanzo (U.S. Pub. No. 2001/0045346) in view of Nakamura.

Claims 1-6, 8-14, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over (U.S. Pub. No. 2002/0195321) or Costanzo (U.S. Pub. No. 2001/0045346) in view of Verdigets et al. (U.S. Patent No. 5,904,241).

These rejections were set forth in the prior Office Actions, mailed on June 22, 2007 and April 4, 2008. They are repeated and explained below in their entirety, with additional numerals and separate sections from previous office actions combined for clarity.

Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guldenfels (U.S. Pub. No. 2002/0195321) or Costanzo (U.S. Pub. No. 2001/0045346) in view of Nakamura.

Both Guldenfels and Costanzo show a belt module for use with a headed pivot rod 44/38 (Guldenfels reference number/Costanzo reference number) having a plurality of first and second links 20/24 with intercalating link ends 29,32/30,32 with openings 36/36 formed therein for reception of a pivot rod. An edge portion of each module has a pivot rod opening in line with the other openings in the link ends that is larger in diameter than the other pivot rod openings in order to accommodate the heads on the pivot rods and so that the pivot rod can only be removed in one transverse direction (see the enlarged opening in the top portion of Fig. 1 of Guldenfels and the dashed pivot rod head received in the opening in the side of the link of Fig. 1 or

Costanzo). However, neither of the belt modules employ a robust means for keeping the rods in the belt.

Like Guldenfels and Costanzo, Nakamura shows belt module B for use with a pivot rod C having a plurality of first and second links with intercalating link ends with openings formed therein for reception of a pivot rod. An edge portion of the module has a pivot rod opening 15 in line with the openings in the link ends such that the pivot rod can be removed in the transverse direction. The edge portion of the module has a slot 10 formed therein parallel to the direction of belt travel that intersects with the pivot rod opening. A blocking member A is disposed in the slot so that it may be moved between a first position allowing for pivot rod removal and a second position in which the end of the pivot rod is prevented from exiting the edge portion pivot rod opening. The blocking member has detent portions 3 that extend into detent openings 12 when the blocking member is in the first position. Slots 5 allow the blocking member to flex so that the detent members may be moved past walls 13 as the blocking member is moved from the first to the second position. The walls 13 engage the detent members when the blocking member is in the second position. The blocking member has an L-shape so that the forward motion of the blocking member from the first to the second position is limited by the wider portion of the member. Thus Nakamura shows all the structure and steps required by claims 1-17 except for the edge portion pivot rod opening with a larger diameter than the other pivot rod openings.

Nakamura teaches that the blocking member and slot arrangement described above advantageously keeps the pivot rods from migrating out of the belt. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the belt modules of Guldenfels or Costanzo with a slot and blocking member arrangement of the type

shown in Nakamura in order to prevent the pivot rods from migrating out of the belt modules.

When this is done, the resulting apparatus would have all the structure required by claims 1-17.

Claims 1-6, 8-14, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over (U.S. Pub. No. 2002/0195321) or Costanzo (U.S. Pub. No. 2001/0045346) in view of Verdigets et al. (U.S. Patent No. 5,904,241).

Both Guldenfels and Costanzo show a belt module for use with a headed pivot rod 44/38 (Guldenfels reference number/Costanzo reference number) having a plurality of first and second links 20/24 with intercalating link ends 29,32/30,32 with openings 36/36 formed therein for reception of a pivot rod. An edge portion of each module has a pivot rod opening in line with the other openings in the link ends that is larger in diameter than the other pivot rod openings in order to accommodate the heads on the pivot rods and so that the pivot rod can only be removed in one transverse direction (see the enlarged opening in the top portion of Fig. 1 of Guldenfels and the dashed pivot rod head received in the opening in the side of the link of Fig. 1 or Costanzo). However, neither of the belt modules employ a robust means for keeping the rods in the belt.

Verdigets et al. shows belt module for use with a pivot rod having a plurality of first and second links 22/23 with intercalating link ends with openings formed therein for reception of a pivot rod. An edge portion of the module has a pivot rod opening 37 in line with the openings in the link ends such that the pivot rod can be removed in the transverse direction. The edge portion of the module has a slot 32 formed therein parallel to the direction of belt travel that intersects with the pivot rod opening. A blocking member 41 is disposed in the slot so that it may be moved between a first position allowing for pivot rod removal and a second position in

which the end of the pivot rod is prevented from exiting the edge portion pivot rod opening. The blocking member has detent portions 56 that extend into detent openings 29 when the blocking member is in the first position. The blocking member flexes so that the detent members may be moved past walls as the blocking member is moved from the first to the second position. The walls engage the detent members when the blocking member is in the second position. The blocking member has an L-shape so that the forward motion of the blocking member from the first to the second position is limited by the wider portion of the member.

Verdigets et al. teaches that the blocking member and slot arrangement described above advantageously keeps the pivot rods from migrating out of the belt. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the belt modules of Guldenfels or Costanzo with a slot and blocking member arrangement of the type shown in Verdigets et al. in order to prevent the pivot rods from migrating out of the belt modules. When this is done, the resulting apparatus would have all the structure required by claims 11-6, 8-14, and 16-17.

#### **(10) Response to Argument**

In response to these rejections, the applicant argues that one of ordinary skill in the art would not combine the teachings of Nakamura or Verdigets with Costanzo or Guldenfels because nothing in Costanzo or Guldenfels teaches that there is a problem associated with using headed pivot rods. While it may be true that neither Costanzo nor Guldenfels has any specific teaching that they have any problems associated with the headed pivot rods they employ, it is exceedingly rare for a patent to lay out its short comings within its text. If specific teachings of a patent's own problems were required in order to combine the teachings of two references, 103

rejections would be extremely uncommon. People of ordinary skill in the art seek to improve upon prior patents constantly even though the patents themselves do not suggest their own deficiencies because it is clear that, even when an apparatus is adequate for its intended purpose, it is still desirable to improve upon it. Here, it would have been obvious to one of ordinary skill in the art to use the teachings of Nakamura and Verdigets that their slot and blocking member arrangements ensure that pivot rods stay within the links to improve the devices of Costanzo or Guldenfels.

Additionally, in regard to applicant's assertion that Nakamura is directed to headless pivot rods and therefore its teachings may not be used to modify in Costanzo or Guldenfels, it is recognized that the illustrated pivot rod of Nakamura is indeed headless. However the specification does not describe the pivot rods as headed or headless pivot rods, instead simply referring to generic "connecting pins." In particular, column 1, lines 37-42, states that it is an object of the invention to "provide an improved plastic conveyor chain including a plug which positively prevents undesired disengagement of the connecting pin from the pin hole, while allowing the connecting pins to be simply and quickly disengaged from the pin hole whenever necessary." This statement may be viewed as a broad teaching that the plug/blocking member arrangement of Nakamura advantageously prevents undesired disengagement of connecting pins/pivot rods, both headed and headless. Furthermore, even if the teaching of this statement is viewed as being directly applicable only to headless pivot rods by relying too much on the drawings to establish context, one of ordinary skill in the art would understand that the headless and headed and headless pivot rods are analogous art because they serve the same function of holding intercalated conveyor belt modules together. Therefore one of ordinary skill in the art

would be able to apply the teaching of Nakamura to the conveyor belts of Costanzo or Guldenfels without undue experimentation.

Additionally, in regard to applicant's assertion that Verdigets is directed to headless pivot rods and therefore its teachings may not be used to modify in Costanzo or Guldenfels, it is recognized that the illustrated pivot rod of Verdigets is indeed headless. However the specification does not describe the pivot rods as headed or headless pivot rods, instead simply referring to generic "pivot rods" In particular, column 1, lines 40-45, states that it is an object of the invention to "introduce improved novel structure for more reliably retaining headless pivot rods in place during the working like of conveyor belts with little likelihood of catastrophic failure or loss of plugs during normal belt working conditions." This statement may be viewed as a broad teaching that the plug/blocking member arrangement of Verdigets advantageously retains pivot rods, both headed and headless, in place within the conveyor belt. Furthermore, even if the teaching of this statement is viewed as being directly applicable only to headless pivot rods by relying too much on the drawings to establish context, one of ordinary skill in the art would understand that the headless and headed and headless pivot rods are analogous art because they serve the same function of holding intercalated conveyor belt modules together. Therefore one of ordinary skill in the art would be able to apply the teaching of Verdigets to the conveyor belts of Costanzo or Guldenfels without undue experimentation.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Mark Deuble/  
Primary Examiner

Conferees:  
Mark Deuble /md/  
Gene Crawford /gc/  
Heather Shackelford /hcs/